The Files: Contract No. AD-125, T. O. 21 31 January 1962

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Trip Report- CS-11 Collection System [redacted]

1. Project Description:

This task provides for fabrication of a service test model of the CS-11 Collection System, including a remote concealable collection station, and an interrogating base station.

2. Contractual Information:

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a. Initial Cost: [redacted]
b. Initiation Date: June 1960
c. Completion Date: February 1961 Overrun (1) 17 July 61 (2) 15 Aug. 61
d. Deliverable Items: 1 Service Test Model CS-11

3. Date of Meeting: 22 January 1962 25X1A5a1

4. Place of Meeting: [redacted] 25X1A

5. Persons Attending:

Agency 25X1A9a

Mr. [redacted]
Mr.

Non-Agency

Mr. [redacted]

6. Contractor's Performance:

a. On Schedule and expected to remain so: Yes
b. Within Obligated Funds and expected to remain so: Yes
c. Satisfactory Technical Progress: Yes

7. Project Status:

All equipment to be delivered under this task order has been completed, checked, and shipped to the customer. Instruction and maintenance manuals have been received and final engineering reports are in the reproduction process.

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25X1A A serious problem has come up on this program involving the recorder units developed by the subcontractor, [redacted] The ultimate user of this system (Army Security Agency) had requested two of the miniature CS-11 recorders. One of them was to be used at the collection site where it would record information at low speed, and upon interrogation, play back the stored information at high speed through a transmitter to the interrogating base station. A second recorder was to be used at the interrogating base station, and was to be capable of recording the high speed data transmitted from the collection site (with frequencies up to 160 kc) and of playing this information back later at lower speeds for analysis. Delivery of the recorders was very late, extending some six months past the time when the rest of the CS-11 electronic gear was ready and tested. When the units were delivered, it was found that both recorders had been designed to record at low speed and play back at high speed, thus, in effect giving us two identical collection site recorders and no recorder for the base station readout.

A check of the contract files has indicated that the subcontractor was probably never aware that the recorders were to have different characteristics. Specifications for the recorders were never formalized or documented in writing. The mistake seems to have derived from the assumption on the part of the government technical representative that the contractor understood the different uses for which the recorders were to be put, when in fact no such understanding ever existed.

25X1A5a1 The subcontractor was contacted to find out what changes would be necessary in order to modify one of the collection recorders to operate as a base recorder. [redacted] indicated that this would entail a complete redesign and fabrication of the electronic circuitry, and probably a physical relocation of the record, play back, and erase heads. The costs involved in this change would amount to an appreciable fraction of the cost of the recorder, and the time for delivery would be at least several months. It is probable that the task of modifying the present recorder would be greater 25X1A5a1 than that of building an entire new unit.

25X1A5a1 The [redacted] recorders are quite expensive ($10,000 minimum) and the contractor has given considerable thought to using other types of recorders for possible future systems. Discussions with representatives of the [redacted] have indicated that their miniaturized missile recorder (in production) could probably be modified

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to meet CS-11 requirements with a total engineering cost of $5,000, with subsequent units costing $500 each. The [redacted] Laboratory of Middletown, Connecticut, also makes a small missile recorder which could probably be modified for CS-11 applications. 25X1A5a1 Neither of these units is as small or light as the [redacted] recorder, but the slightly increased size may not be too significant.

Solution of the problem now breaks down into two main possibilities One possibility is that the ASA does not need a miniaturized recorder for the base station, and would be satisfied with a small instrumentation type recorder such as the PS-200. This requirement could be immediately satisfied. 25X1A5a1 The second possibility is that ASA does have need of a miniaturized recorder at their base station. If this is the case, a new recorder would have to be built by [redacted] or one 25X1A5a1 of the other companies in the above paragraph. If time is of the greatest interest, it would probably be desirable to request [redacted] 25X1A5a1 to build the unit. If cost is the major consideration, (both for the first unit and for possible future units) it would be better to give consideration to a company such as [redacted] 25X1A5a1

In any case, the two collection recorders which are now on hand should both be useful. If ASA does not wish a second, or spare, collection site recorder; then this second recorder could be modified very easily (about one days work) to operate in the CS-11 system owned by this Agency. Since this Agency does not at the present time have a working recorder for their system, it would serve to make the system operationally ready for field usage.

It is recommended that a conference be held as soon as possible between representatives of the ASA and this Agency to determine the best course of action to follow on this problem.

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